examination of trajectory patterns of patient-level health care costs. The model was adjusted for baseline demographics, Charlson comorbidity index (CCI), body system index (BSI), and prior medication index (PMI). Rates of change (slopes) were estimated from the fitted model and differences in the cost trajectory patterns among dosing cohorts were tested using F-test. Bootstrapping was used to provide a sensitivity analysis. **RESULTS:** A repeated measures linear mixed model with dose, month, and dose*month as fixed effects and patient, patient*dose as a random effects, adjusting for demographics, CCI, BSI, and PMI, was developed. Main effects and covariates were all significant (all $p<.05$). The model revealed that total health care costs increased sharply in the months leading up to, and decreased in the months following, initiation of duloxetine treatment for each dosing cohort and the overall cohort (all $p<.05$). Compared to patients given low- or standard-dose therapy, patients who received high-dose duloxetine had higher health care expenses both prior to and following initiation of duloxetine therapy ($p<.05$). Bootstrapping confirmed the above test results. **CONCLUSIONS:** Longitudinal models provide great opportunities to assess changes in cost trajectory patterns around the time of changes in medical treatment compared to the current standard mean methods. In this analysis, health care costs increased prior to the initiation of duloxetine therapy, perhaps signaling a clinical deterioration that led to a change in treatment strategy. Health care costs then decreased following initiation of duloxetine treatment.

PMH14

REAL-LIFE COST-ANALYSES OF PATIENTS WITH GENERALIZED ANXIETY DISORDER IN DENMARK

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OBJECTIVES: To evaluate the health care and productivity costs in patients with generalized anxiety disorder (GAD) before and after the initiation of a SSRI (selective serotonin re-uptake inhibitor), a SNRI (serotonin norepinephrine re-uptake inhibitor), benzodiazepine or pregabalin. **METHODS:** Patients with an ICD10-code F40-F41 and at least two prescription claims for either SSRI, SNRI, benzodiazepin or pregabalin were identified using data from the Danish National Patient Registry, the Psychiatric Central Registry, the Medicinal Registry and other registries (2006-2010). Patients identified with neuropathic pain were excluded. The index date was considered the first prescription for SSRI, SNRI, benzodiazepines or pregabalin. Descriptive assessments of health care and productivity costs were conducted 12 months pre and post the index date using the full dataset, whereas a sub-analysis focussed on F41.1 (GAD). To control for selection bias, a propensity score matched cohort controlling for age, gender, Charlson score, depression, alcoholism, socioeconomic and cohabit status, and health care resource use was also conducted. Statistical tests performed were Wilcoxon ($\alpha=0.05$). **RESULTS:** A total of 18,357 (F40-F41) patients met the inclusion criteria (treatment courses included: 14,095 SSRI; 5,035 SNRI; 8,580 benzodiazepines; 1,628 pregabalin). Twelve months health care costs were only significantly reduced in the pregabalin group (€1,285; $P<0.001$). The three other groups resulted in significantly increased health care costs (€808-€1,548; $P<0.001$). Similar results were found focusing only on F41.1; however insignificant for pregabalin. Matched sub-analyses covering 1,588 patients in each group showed similar significant reduced 12 months health care costs in the SNRI and pregabalin groups ($P=0.001$). Across all four groups the ability to retain employment was significantly improved, whereas long-term sickness increased; however, insignificantly so in the pregabalin group. **CONCLUSIONS:** Health care costs 12 months after the initiation of the treatment with pregabalin were significantly reduced. Besides pregabalin, this was in matched analyses also the case for the SNRI group. Production loss did not differ between groups.

PMH15

AN ECONOMIC SYSTEMATIC REVIEW ON BIPOLAR DISORDER IN CHILDREN AND ADOLESCENTS: COST-EFFECTIVENESS OF TREATMENTS, COSTS OF CARE AND QUALITY OF LIFE

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OBJECTIVES: A 2005 systematic review identified no cost-effectiveness studies in paediatric bipolar disorder (PBD). Following a recent surge in clinical research on the use of atypical antipsychotics in this area, an update of the review is necessary to inform economic models. The current systematic review objective was to identify all literature published since 2005 on economic aspects of PBD. **METHODS:** EMBASE, MEDLINE, PsychINFO, CINAHL, EconLIT, and NHSEED were systematically searched from 2005 to January 2012. Articles were included if they reported an economic evaluation (cost-minimisation, cost-effectiveness, cost-utility or cost-benefit study), details of costs of care, resource use, health-related quality of life (HRQoL) or utilities for patients aged <18 years with bipolar disorder. No limits were put on language or country. Full texts of potentially relevant articles were obtained and assessed against the same inclusion criteria. Reference lists and congress abstracts were also searched. **RESULTS:** Of 5388 search results, 104 were deemed potentially relevant. After review of full texts, 5 studies were included that reported HRQoL data for bipolar patients <18yrs. No articles were found that reported on economic evaluations, costs of care, resource use or utilities for PBD. Two congress abstracts reported PQ-LES-Q values from an aripiprazole RCT and 1 reported CHQ-PF50 from a quetiapine RCT. Both treatments were found to improve HRQoL, but the difference from placebo did not reach significance for aripiprazole over the 4 week trial. Other studies found that PBD was associated with significantly lower HRQoL than other common childhood conditions and that HRQoL might be more affected by depressive than manic symptoms. **CONCLUSIONS:** Despite the increase in the number of clinical trials on treatments for paediatric bipolar disorder, there are currently no published cost-effectiveness studies, cost/resource use data or utilities. These data will be required to inform reliable cost-effectiveness models of treatments in this field.

PMH16

ANALYSIS OF THE ECONOMIC BURDEN AND COST STRUCTURE OF SCHIZOPHRENIA IN GERMANY USING OBSERVATIONAL SICKNESS FUND DATA

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OBJECTIVES: In Germany, about 500,000 people suffer from Schizophrenia. Due to its chronic relapsing course that involves fundamental functional and social impairment, schizophrenia has emerged as a dominant burden to society. However, studies to determine the economic consequences of the disease have largely been carried out in clinical settings based on a relatively small number of cases. Therefore we aim to assess the medical and non-medical consequences of schizophrenia as well as the cost structure across treatment settings and population characteristics using administrative data. **METHODS:** Costs attributable to Schizophrenia were estimated using a case-control design, where 26,294 patients drawn from a sickness fund administrative database were matched to 9,319 patients with a confirmed diagnosis of schizophrenia (ICD-10: F20). To obtain balance between both groups in a set of observed pre-treatment variables (age, sex, prior number of drug prescriptions, Elixhauser comorbidities) and to reduce the conditional bias, a genetic matching algorithm was employed. Eventually, costs and other health care resource utilization parameters for cases and controls were recorded during 2008. **RESULTS:** The annual cost attributable to Schizophrenia amounts to € 10610 per patient from the payer's perspective, and € 19927 from the societal perspective. Lost productivity (46.6%), inpatient treatment (29.0%) and nursing care (14.3%) are the major cost drivers of the disease. The burden of disease of Schizophrenia in Germany is estimated to be approximately € 5220 million per year from the sickness fund perspective and € 9804 million from the societal perspective. **CONCLUSIONS:** While our calculations still underestimate the true burden of disease due to restricting quality of life to production forgone and due to ignoring the impact on family members, considerable direct and indirect costs of schizophrenia highlight the need for further research in order to improve care patterns and to find innovate treatment solutions.

PMH17

ECONOMIC BURDEN IN SCHIZOPHRENIA: A LITERATURE REVIEW

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OBJECTIVES: Schizophrenia places a heavy burden on individuals and their caregivers, as well as potentially placing a large demand on the health care system and its resources. The objective was to understand the cost burden imposed by schizophrenia, and to identify the key drivers of costs. **METHODS:** We conducted a literature review capturing reviews and recent individual studies on costs of the disease in Europe and US, using Embase and Medline databases. **RESULTS:** Thirty-six references were included, covering 8 countries (UK, France, Germany, Norway, Canada, US, India and Thailand). Costs described were mainly those related to care settings (hospital or community), pharmacological and non pharmacological therapies, comorbidities and family or caregiver costs. The absolute costs were variable across studies (e.g. from €5,000 to €12,000 per year in England, from $8,000 to $26,000 per year in Canada and from 86,000THB to 146,000 THB in Thailand). This was due primarily to the differences in the national health care system, but also to the type of costs included in the analyses. Key drivers of costs included gender (male patients were about 50% more costly), type of medication, and previous psychiatric hospital admission. Costs also increased with severity of the disease. **CONCLUSIONS:** The burden of schizophrenia is significant regardless of the country; however variable estimates of the burden are available in literature due mainly to the treatment regimens used and the approaches to schizophrenia care (e.g. hospital based versus community-based) in respective countries. At present, there is a need of a standard method for quantitatively assessing and aggregating the various aspects of the cost of schizophrenia.

PMH18

TREATMENT PATTERNS AND COSTS IN PATIENTS WITH SCHIZOPHRENIA IN GERMANY

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OBJECTIVES: Schizophrenia is a chronic and disabling severe mental disorder with considerable economic importance. Detailed estimates of treatment patterns and costs of outpatient and inpatient treatment of patients with schizophrenia are an important input factor for health economic cost-effectiveness models. Up to date there are several publications which assess the treatment patterns and costs of schizophrenia in Germany. However, most of the information is limited as an input for cost-effectiveness models due to the fact that differentiated micro information about the frequency of contacts in different treatment areas and costs of a single contact are missing. Therefore, we examine the treatment patterns and micro costs of treatment of schizophrenia re-